

REMARKS

*Amendments*

Claim 4 has been amended by adding “and” at the end of line 4 to clarify the paragraph formatting and on the next to the last line to replace “a” with “the” since the peripheral hermetic has an antecedent basis in claim 1.

Claim 12 has been amended to replace “a” with “the” since the hermetic has an antecedent basis in claim 11.

Claim 15 has been amended to delete an extraneous “to”. The claim has also been amended in two places to pluralize “substrate” since first and second “substrates” are involved. The electrodes to the channel have been clarified to be “connected” to the channel.

No amendment is related to the statutory requirements of patentability or for the purpose of narrowing the scope of any claim within the meaning of *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co. Ltd.*, No. 95-1066 (Fed. Cir. September 26, 2003).

*Claim Rejections - 35 USC §102*

Claims 11-16 and 18-20 were rejected in the parent application under 35 USC §102(b) as being anticipated by Graf (USPN 3,955,059, hereinafter “Graf”).

Graf apparently discloses an electrostatically controlled electrical relay switch, which includes two chambers joined together by a constricted region therebetween. A conducting liquid, such as mercury, is positioned in one of the chambers and the movement thereof between the chambers is controlled by an electrostatic field. [Graf Abstract] A first dielectric plate 11 has a first and second chamber 13 and 15, respectively, formed therein, which chambers are connected by means of a constricted region 17. At the other end of each of the chambers is a through-hole, which through-holes 19 and 21 are connected to the associated chambers 13 and 15, respectively, by means of channels 23 and 25, respectively. [Graf col. 2, lines 44-52]

Applicants respectfully traverse the rejections since the Applicants' claimed combination, as exemplified in claim 11, includes the limitation not disclosed in Graf of:

“a second substrate...and the first substrate collectively including:  
..., and  
a trench surrounding the fluid conductor switch device structure;”  
[deletions and underlining for clarity]

The Examiner states in the Office Action:

“Graf teaches a switching device comprising:  
a second substrate 27, the substrates collectively including:  
...;  
a trench 19 and 21 surrounding the switch device;”

However, Graf elements 19 and 21 are not a trench and they do not surround the switch device as described in Graf col. 2, lines 48-52:

“At the other end of each of the chambers is a through-hole 19 and 21, respectively, which through-holes are connected to the associated chambers 13 and 15, respectively, by means of channels 23 and 25, respectively.”  
[underlining for clarity]

The Random House Webster's College Dictionary, p. 1422, Random House Inc., c. 1996, 1995, 1992, 1991, defines a “trench” as:

“a long, narrow excavation...”

As should be evident to those having ordinary skill in the art, a “trench” would not read on the Graf “through-hole”. Further, a trench would not read on two through-holes.

The Random House Webster's College Dictionary, p. 1345, *supra.*, defines “surround” as:

“to enclose on all sides...”

As should be evident to those having ordinary skill in the art, a hole would not “surround” the switch.

The Federal Circuit stated:

“[a]nticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, *arranged as in the claim.*” [*emphasis added*] *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.* (730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984)(citing *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 220 USPQ 193 (Fed. Dir. 1983)))

Therefore, it is believed that a *prima facie* case of anticipation cannot be made based on Graf.

It is respectfully submitted that the independent claims 1, 7, 11, and 15, and the respective claims depending therefrom, are not anticipated by Graf taken singularly under 35 USC §102 or obvious in combination under 35 USC §103 with the other cited references.

*Conclusion*

In view of the above, it is submitted that the claims are in condition for allowance and reconsideration of the rejections is respectfully requested. Allowance of claims 1-16 and 18-20 at an early date is solicited.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including any extension of time fees, to Deposit Account No. 50-1078 and please credit any excess fees to such deposit account.

Respectfully submitted,  
Mikio Ishimaru

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I hereby certify that this is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on The date indicated above and is addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria VA 22313-1450.

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